§ 816.68 Use of explosives: Records of blasting operations.

The operator shall retain a record of all blasts for at least 3 years. Upon request, copies of these records shall be made available to the regulatory authority and to the public for inspection. Such records shall contain the following data:

(a) Name of the operator conducting the blast.

(b) Location, date, and time of the blast.

(c) Name, signature, and certification number of the blaster conducting the blast.

(d) Identification, direction, and distance, in feet, from the nearest blast hole to the nearest dwelling, public building, school, church, community or institutional building outside the permit area, except those described in § 816.67(e).

(e) Weather conditions, including those which may cause possible adverse blasting effects.

(f) Type of material blasted.

(g) Sketches of the blast pattern including number of holes, burden, spacing, decks, and delay pattern.

(h) Diameter and depth of holes.

(i) Types of explosives used.

(j) Total weight of explosives used per hole.

(k) The maximum weight of explosives detonated in an 8-millisecond period.

(l) Initiation system.

(m) Type and length of stemming.

(n) Mats or other protections used.

(o) Seismographic and airblast records, if required, which shall include—

(1) Type of instrument, sensitivity, and calibration signal or certification of annual calibration;

(2) Exact location of instrument and the date, time, and distance from the blast;

(3) Name of the person and firm taking the reading;

(4) Name of the person and firm analyzing the seismographic record; and

(5) The vibration and/or airblast level recorded.

(p) Reasons and conditions for each unscheduled blast.

[48 FR 9809, Mar. 8, 1983, as amended at 52 FR 29181, Aug. 6, 1987]

§ 816.71 Disposal of excess spoil: General requirements.

(a) *General.* Excess spoil shall be placed in designated disposal areas within the permit area, in a controlled manner to—

(1) Minimize the adverse effects of leachate and surface water runoff from the fill on surface and ground waters;

(2) Ensure mass stability and prevent mass movement during and after construction; and

(3) Ensure that the final fill is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use.

(b) *Design certification.* (1) The fill and appurtenant structures shall be designed using current, prudent engineering practices and shall meet any design criteria established by the regulatory authority. A qualified registered professional engineer experienced in the design of earth and rock fills shall certify the design of the fill and appurtenant structures.

(2) The fill shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments of the fill must be stable under all conditions of construction.

(c) *Location.* The disposal area shall be located on the most moderately sloping and naturally stable areas available, as approved by the regulatory authority, and shall be placed, where possible, upon or above a natural terrace, bench, or berm, if such placement provides additional stability and prevents mass movement.

(d) *Foundation.* (1) Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the fill and appurtenant structures.

(2) Where the slope in the disposal area is in excess of 2.8h:1v (36 percent), or such lesser slope as may be designated by the regulatory authority based on local conditions, keyway cuts (excavations to stable bedrock) or rock toe buttresses shall be constructed to